

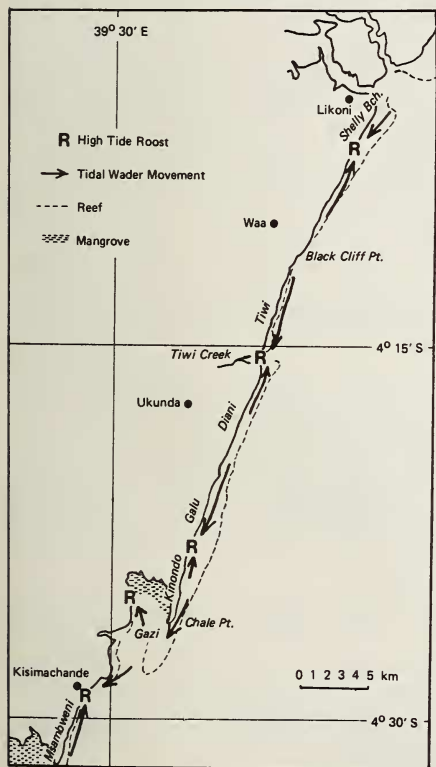
## SOME COUNTS OF WINTERING WADERS ON THE SOUTH KENYA COAST

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The coral and sand beaches, flats and reefs of the Kenya littoral provide winter feeding areas for many thousands of Palaearctic waders. During the past ten years, these coastal waders have quite frequently been counted at certain high tide roosting areas, notably at Ras Iwetine at Mombasa, at Mida Creek and at Shelley Beach and Galu Beach on the south coast (Britton & Britton 1976; unpubl. obs. of the author, P.L. Britton and M.A.C. Coverdale). However, no systematic survey of numbers appears to have been attempted for any substantial stretch of the coast, and apart from the order of numbers indicated by Pearson & Britton (1980) no estimate of the coastal wader population has previously been reported. Over a series of spring tides from 1-5 January 1984 the author endeavoured to locate and count all high tide wader roosts along the Kenya south coast from Likoni to Msambweni. Spring tides were chosen because birds are then less scattered and tend to be concentrated into fewer gatherings at high water than during neap periods. Only five significant roosts were found along the 60 km stretch of coastline concerned. The location of these, and the direction of the main wader movements noted on incoming tides are shown on the map. A

roost at the southern extremity of Shelley Beach included birds which moved in from extensive coral flats to the north-east, and apparently from as far as Black Cliff Point to the south. The next, at Tiwi Creek, accommodated birds flying in from Tiwi Beach feeding areas to the north, and from the reefs and coral beaches along the northern part of Diani. A roost along the high sandy beach at Galu certainly accounted for birds from the southern part of Diani, from Galu and perhaps from Kinondo to the south. A small gathering on a sandbar at the back of Gazi Flats accounted approximately for the birds normally to be found feeding on the flats at low tide. Finally, a roost on a small beach at Kisimachande was thought to include birds from feeding areas around Chale Point as well as from Msambweni Reef.

Details of counts at the five roosts are given in Table 1. The two species of sandplover are very difficult to count separately when present together in large mixed flocks, and numbers of the two are therefore tabulated together. The <sup>1</sup>Great Sandplover was, however, invariably the dominant species of the two; it was considered to have accounted for about 70 per cent of the sandplovers at Tiwi, 80 per cent



at Galu and 90 per cent at Shelley Beach and Kisimachande. The main species making up the total of just over 8000 waders found were thus Great Sandplover, Curlew Sandpiper, Sanderling, Turnstone and Grey Plover. Turnstones were found mainly along the Diani-Galu section where tidewrack patches were most abundant. Little Stints were generally scarce; the only substantial numbers

TABLE 1. PALAEARCTIC WADER COUNTS AT HIGH TIDE ROOSTS ON THE SOUTH KENYA COAST  
JANUARY 1984

Date and height of high water above datum at Kilindini	1 Jan (2.70m)	2 Jan (2.80m)	3 Jan (2.86m)	4 Jan (2.89m)	5 Jan (2.90m)		
Roost counted	Tiwi Creek (birds in from S)	Tiwi Creek (birds in from N)	Shelley Beach	Galu Beach	Msam- bweni Beach	Gazi Flats	
							Totals*
Oystercatcher	0	0	0	2	0	0	2
<i>Haematopus ostralegus</i>							
Caspian Plover	0	0	1	0	1	0	2
<i>Charadrius asiaticus</i>							
Ringed Plover	30	22	60	80	40	12	244
<i>C. hiaticula</i>							
Great/Mongolian Sandplover	125	60	1100	480	660	200	2630
<i>C. leschenaultii/mongolus</i>							
Grey Plover	73	60	90	240	80	60	203
<i>Pluvialis squatarola</i>							
Common Sandpiper	5	2	10	0	0	2	19
<i>Actitis hypoleucos</i>							
Whimbrel	9	10	80	2	35	1	137
<i>Numenius phaeopus</i>							
Greenshank	6	10	11	3	3	30	63
<i>Tringa nebularia</i>							
Terek Sandpiper	21	11	10	125	70	20	257
<i>Xenus cinereus</i>							
Sanderling	310	90	400	350	150	20	1320
<i>Calidris alba</i>							
Curlew Sandpiper	285	190	150	600	500	60	1790
<i>C. ferruginea</i>							
Little Stint	3	0	250	0	3	90	346
<i>C. minuta</i>							
Turnstone	225	60	60	300	90	0	735
<i>Arenaria interpres</i>							
Crab Plover**	0	0	20	2	220	0	242
<i>Dromas ardeola</i>							
ROOST TOTALS*	1610		2240	2180	1840	495	8370

\* Totals rounded to three significant figures

\*\*A migrant visitor from northeast Africa, the Crab Plover is only marginally a Palaearctic species

in roosts were from localised feeding areas on fine silty sand at the southern end of Shelley Beach and on the Gazi Flats. The only Whimbrel gatherings of any size were derived from the reefs north of Shelley Beach and off Chale Point and Msambweni. Crab Plovers are known to occur commonly on the reefs of the southernmost part of the Kenya coast (M.A.C. Coverdale, pers. comm.) but the Kisimachande count is perhaps the largest reported in Kenya away from the traditional Mida site on the north coast. Numbers of Terek Sandpipers from Galu to Msambweni are also noteworthy since again these seem to be the largest recorded in Kenya away from Mida; Terek numbers along Galu beach in fact regularly exceed 100 on spring high tides (unpubl. obs. of the author and M.A.C. Coverdale).

Some small high tide parties may well have been overlooked on the beaches at Waa, or at Kinondo, and species such as the Ringed Plover and Common Sandpiper which remain quite scattered at high tide were probably underestimated. Nevertheless, the species totals produced by this survey were thought to represent reasonable estimates for the wader population of the 60 km stretch of coastline immediately south of Mombasa. It seems appropriate here to consider the information available on wintering wader numbers elsewhere on the Kenya coast. North of Mombasa Is., from Nyali to Mtwapa Creek, P.L. Britton (pers. comm.) regularly found 1000-2000 waders, a high proportion of these gathering at a high tide roost at Ras Iwetine. Further north, the author counted some 1500 waders at low tide in February along a 10 km coastal stretch northwards from Kilifi, which were presumed to represent about half the birds feeding between Kilifi and Mida. There are typically about 5000 wintering waders feeding on Mida Creek itself (author's obs., unpubl.) and some 3000-4000 to be found from Malindi north to the Sabaki mouth. A few more thousands would be accounted for by feeding areas from Malindi south to Watamu, and from Vipingo to Kikambala. In all, therefore, some twenty thousand would seem to be the best estimate for wintering numbers between Nyali and Sabaki. For the whole of the coast from Msambweni to the Sabaki (some 200 km) this would give almost thirty thousand waders. Numbers of individual species would probably lie within the following ranges:

Curlew Sandpiper 6000-12000; Great Sandplover 6000-12000; Sanderling 3000-6000; Grey Plover 2000-3000; Turnstone 1000-3000; Mongolian Sandplover 1000-3000; Terek Sandpiper 1000-2000; Ringed Plover 1000-2000; Little Stint 1000-2000; Whimbrel 500-1000.

These are of course very provisional figures. A much more accurate census of this stretch of coastline could be carried out by a small team over a single series of spring tides, and this would clearly be a worthwhile exercise. In addition, the remaining 300 or so kilometres of the Kenya coast, including the sandy beaches and flats around Formosa Bay and muddy mangrove areas around Lamu and Pate in the north, and the mangrove dominated stretch from Funzi to the Tanzania border in the south, would certainly repay more investigation.

#### REFERENCES

- BRITTON, H.A. & BRITTON, P.L. 1976. Records Section (Birds). *EANHS Bulletin* 1976: 55-61.
- PEARSON, D.J. & BRITTON, P.L. 1980. Arrival and departure times of Palaearctic waders on the Kenya coast. *Scopus* 4: 84-88.
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